

AUTHOR INDEX TO VOLUME 158

- Ajito, K., M. Takahashi and M. Ito, Vibrational frequency shift induced by protonation on pyridine studied by ab initio molecular orbital calculation 158 (1989) 193
- Alimi, R., see R.B. Gerber 158 (1989) 257
- Andrews, L., R.B. Bohn, R.T. Arlinghaus and R.D. Hunt, Matrix infrared spectra of HF complexes with N₂O, OCS and CS₂ 158 (1989) 564
- Apkarian, V.A., see R.B. Gerber 158 (1989) 257
- Aquilanti, V., A. Laganà and R.D. Levine, On the all channels representation of the potential energy surface for reactive collisions 158 (1989) 87
- Arai, T., T. Karatsu, H. Sakuragi, K. Tokumaru, N. Tamai and I. Yamazaki, Highly selective rotational isomerization of 2-vinylnanthracene in the excited singlet state. Picosecond time-resolved fluorescence study 158 (1989) 429
- Arepalli, S., see R. Callaghan 158 (1989) 531
- Arishima, K., see T. Shimada 158 (1989) 435
- Arlinghaus, R.T., see L. Andrews 158 (1989) 564
- Armony, J.L. and E.W. Thulstrup, A low-cost method for the determination of vibrational transition moment directions 158 (1989) 107
- Augspurger, J.D. and C.E. Dykstra, Weak, long-range complexes of Mg with HF and H₂ 158 (1989) 399
- Awaga, K. and Y. Maruyama, Ferromagnetic intermolecular interaction of the organic radical, 2-(4-nitrophenyl)-4,4,5,5-tetramethyl-4,5-dihydro-1H-imidazolyl-1-oxy 3-oxide 158 (1989) 556
- Baer, M., E. Garcia, A. Laganà and O. Gervasi, An approximate three-dimensional quantum-mechanical study of the Li+HF→LiF+H reaction 158 (1989) 362
- Bahnmaier, A.H., see R.-D. Urban 158 (1989) 443
- Baker, G.L., see G.J. Blanchard 158 (1989) 329
- Baldrige, K.K., see M.S. Gordon 158 (1989) 189
- Barron, L.D., see L. Hecht 158 (1989) 341
- Bartlett, R.J., see M.S. Gordon 158 (1989) 189
- Bartlett, R.J., see S.A. Kucharski 158 (1989) 550
- Bassi, D., see A. Boschetti 158 (1989) 1
- Bauer, W., B. Engelhardt, P. Wiesen and K.H. Becker, Lifetime measurements of GeH and CH in the A²Δ, v'=0 state by laser-induced fluorescence 158 (1989) 321
- Bauschlicher Jr., C.W., S.R. Langhoff and P.R. Taylor, On the electron affinities of the Ca, Sc, Ti and Y atoms 158 (1989) 245
- Bauschlicher Jr., C.W. and S.R. Langhoff, Theoretical study of NiAr⁺ 158 (1989) 409
- Becker, K.H., see W. Bauer 158 (1989) 321
- Berezhkovskii, A.M. and V.Yu. Zitserman, Anomalous regime for decay of the metastable state: an extension of multidimensional Kramers theory 158 (1989) 369
- Berlin, Yu.AA., see A. Plonka 158 (1989) 380
- Bernholdt, D.E., see M.S. Gordon 158 (1989) 189
- Berrondo, M., see J. Récamier 158 (1989) 116

- Blanchard, G.J., J.P. Heritage, G.L. Baker and S. Etemad, The picosecond spectroscopy of a polydiacetylene in the small signal limit: detection and characterization of a new long-lived state 158 (1989) 329
- Blankespoor, S.C., see R.D. van Zee 158 (1989) 306
- Blasse, G., L.H. Brixner and N. Sabbatini, X-ray-excited luminescence of samarium(III), europium(III), gadolinium(III) and terbium(III) 2.2.1 cryptates 158 (1989) 504
- Blasse, G., see H. Donker 158 (1989) 509
- Bloomfield, L.A., see Y.A. Yang 158 (1989) 279
- Bohn, R.B., see L. Andrews 158 (1989) 564
- Boicelli, C.A., see M. Giomini 158 (1989) 334
- Bolduc, P.R., see P. Politzer 158 (1989) 463
- Bondybey, V.E., see M.F. Cai 158 (1989) 475
- Boschetti, A., M. Scotoni, L. Quercia and D. Bassi, On Raman-induced photodissociation of neutral van der Waals clusters with visible laser light 158 (1989) 1
- Böttcher, H., O. Hertz and M.A. Fox, Structural and photophysical properties of pure and mixed evaporated merocyanine layers 158 (1989) 453
- Brewer, W.E., S.L. Studer, P.-T. Chou and E. Orton, Temperature-dependent study of the ground-state reverse proton transfer of 3-hydroxyflavone 158 (1989) 345
- Brion, J., see J. Malicet 158 (1989) 293
- Brixner, L.H., see G. Blasse 158 (1989) 504
- Buck, M. and P. Hess, A study of IR laser-induced desorption from benzene films by time-of-flight spectroscopy 158 (1989) 486
- Bunton, C.A., see B. Focher 158 (1989) 491
- Burkholder, J.B., see J. Wormhoudt 158 (1989) 480
- Burton, K.A., see J.T. Miller 158 (1989) 179
- Cacelli, I., Ab initio calculation of the Franck-Condon factors for ionization of HF and DF to $X^2\Pi$ and $A^2\Sigma^+$ states 158 (1989) 199
- Cai, M.F., T.A. Miller and V.E. Bondybey, Generation of cold free radicals by the reaction of organic halides with metal atoms produced by laser vaporization 158 (1989) 475
- Callaghan, R., Y.-L. Huang, S. Arepalli and R.J. Gordon, Single-photon VUV laser-induced fluorescence spectra of HCl and HBr 158 (1989) 531
- Castellano, E., see A.E. Croce 158 (1989) 157
- Chekunaev, N.I., see A. Plonka 158 (1989) 380
- Chou, P.-T., see W.E. Brewer 158 (1989) 345
- Churakov, V.V., see A.S. Solodukhin 158 (1989) 70
- Ci, X. and A.B. Myers, A resonance Raman study of solvent effects on the excited state potential surface of trans-stilbene 158 (1989) 263
- Clement, S.G., see A.P. Cox 158 (1989) 6
- Cobos, C.J., see A.E. Croce 158 (1989) 157
- Cogdell, R.J., see T. Gillbro 158 (1989) 312
- Conover, C.W.S., see Y.A. Yang 158 (1989) 279
- Couch, A.D., see A.P. Cox 158 (1989) 6
- Cox, A.P., A.D. Couch, I.M. Hedgecock and S.G. Clement, Microwave detection, structures and dipole moments of SiF_3CN and SiF_3NC 158 (1989) 6
- Croce, A.E., C.J. Cobos and E. Castellano, Pulsed laser photolysis study of the reaction $Cl + FSO_3 + M \rightarrow FSO_2OCl + M$ 158 (1989) 157

Danielewicz-Ferchmin, I., On the non-linear dielectric effect in some non-polar liquids and nitrobenzene, <i>Chem. Phys. Letters</i> 155 (1989) 539. Erratum	158 (1989) 571
Daul, C.A., see S.M. Jacobsen	158 (1989) 77
Daumont, D., see J. Malicet	158 (1989) 293
DeFrees, D.J. and A.D. McLean, A priori predictions of the rotational constants for HC ₁₃ N, HC ₁₅ N, and C ₅ O	158 (1989) 540
Degen, J., see T. Schönerr	158 (1989) 519
Dick, B., On the barrier to excited-state intramolecular proton transfer (ESIPT): The controversial assignment of the spectra of 2,5-bis(2-benzoxazolyl)hydroquinone in solid argon	158 (1989) 37
Donker, H., W. van Schaik, W.M.A. Smit and G. Blasse, On the luminescence of selenium(IV) in A ₂ ZrCl ₆ (A=Cs, Rb)	158 (1989) 509
Dunne, L.J., Quasiclassical dynamical study of the reaction O(¹ D)+HD(¹ Σ ⁺)→OD/OH(² Π)+H/D(² S) on a two-valued potential energy surface	158 (1989) 535
Dye, R.C., see M.E. Morrow	158 (1989) 499
Dykstra, C.E., see J.D. Augspurger	158 (1989) 399
Eckhardt, C.J., see M.E. Morrow	158 (1989) 499
El'tsov, K.N., G.Ya. Zueva, A.N. Klimov, V.V. Martynov and A.M. Prokhorov, Surface-enhanced Raman scattering observed on chlorinated Cu(111)	158 (1989) 271
Engel, P.S., see J.T. Miller	158 (1989) 179
Engelhardt, B., see W. Bauer	158 (1989) 321
Etemad, S., see G.J. Blanchard	158 (1989) 329
Evans, M.W., Time-asymmetric cross correlation functions in liquid water induced by electric field combinations: a computer simulation	158 (1989) 375
Fink, M., see C.K. Teh	158 (1989) 351
Focher, B., G. Savelli, G. Torri, G. Vecchio, D.C. McKenzie, D.F. Nicoli and C.A. Bunton, Micelles of 1-alkyl glucoside and maltoside: anomeric effects on structure and induced chirality	158 (1989) 491
Fox, M.A., see H. Böttcher	158 (1989) 453
Franko, M. and C.D. Tran, Temperature effect on photothermal lens phenomena in water: photothermal defocusing and focusing	158 (1989) 31
Fueno, T., see Y. Takahara	158 (1989) 95
Fujita, M., see Y. Kotagiri	158 (1989) 440
Fuke, K., see S. Nonose	158 (1989) 152
Gallhuber, E., see T. Schönerr	158 (1989) 519
Garcia, E., see M. Baer	158 (1989) 362
Gärtner, W., see H.-W. Trissl	158 (1989) 515
Garzón, I.L., X.P. Long, R. Kawai and J.H. Weare, Structural and dynamical properties of van der Waals clusters with impurities	158 (1989) 525
Gerber, R.B., see G. Petrella	158 (1989) 250
Gerber, R.B., R. Alimi and V.A. Apkarian, Ion migration following charge transfer reactions in rare-gas solids: the role of hole hopping	158 (1989) 257
Gervasi, O., see M. Baer	158 (1989) 362
Ghoshal, S.K., Resonant third-order optical nonlinearity in polypyrrole	158 (1989) 65
Gillbro, T. and R.J. Cogdell, Carotenoid fluorescence	158 (1989) 312

Giomini, M., A.M. Giuliani, E. Trotta and C.A. Boicelli, The use of NMR parameters for the evaluation of the critical micelle concentration of lecithin in reverse micellar systems	158 (1989) 334
Gislason, E.A. and M. Sizun, High energy model for chemical reactions: comparison with trajectory results	158 (1989) 102
Giuliani, A.M., see M. Giomini	158 (1989) 334
Godfrey, D.C., see B.E. Hayden	158 (1989) 18
Gordon, M.S., K.K. Baldridge, D.E. Bernholdt and R.J. Bartlett, The transition state and barrier heights for the reaction $O(^3P) + HCl \rightarrow OH + Cl$	158 (1989) 189
Gordon, R.J., see R. Callaghan	158 (1989) 531
Griller, D., see J.A. Martinho Simões	158 (1989) 175
Güdel, H.U., see S.M. Jacobsen	158 (1989) 77
Guillot, B., see M. Krauss	158 (1989) 142
Ha, T.-K., see M.T. Nguyen	158 (1989) 135
Hall, G.E. and T.J. Sears, Probing chemical reaction dynamics by rotational spectroscopy: the OH rotational distribution in the reaction $H + O_2 \rightarrow OH + O$	158 (1989) 184
Hamdan, H. and J. Klinowski, ^{27}Al quadrupole nutation NMR studies of amorphous aluminosilicates	158 (1989) 447
Hancock, G. and D.E. Heard, Time-resolved pulsed FTIR emission studies of atom-radical reactions: product chemiluminescence from the $O(^3P) + CF_2(\tilde{X}^1A_1)$ reaction	158 (1989) 167
Harrison, J.A. and H.R. Mayne, The effect of reagent rotation on reactivity: classical decoupling approximations	158 (1989) 356
Harrison, R.J. and S. Zarrabian, An efficient implementation of the full-CI method using an $(n-2)$ -electron projection space	158 (1989) 393
Hartke, B., R. Kosloff and S. Ruhman, Large amplitude ground state vibrational coherence induced by impulsive absorption in CsI. A computer simulation	158 (1989) 238
Hayden, B.E. and D.C. Godfrey, Adsorbate-mediated resonant energy transfer during inelastic scattering from Cu(110)	158 (1989) 18
Haydock, C., see P. Ilich	158 (1989) 129
Heard, D.E., see G. Hancock	158 (1989) 167
Hecht, L., L.D. Barron and W. Hug, Vibrational Raman optical activity in backscattering	158 (1989) 341
Hedgecock, I.M., see A.P. Cox	158 (1989) 6
Henriet, A., C. Le Sech and F. Masnou-Seeuws, Numerical evaluation of two-electron integrals for molecular Rydberg states in systems with two active electrons	158 (1989) 389
Hensler, G., see T. Schönherr	158 (1989) 519
Heritage, J.P., see G.J. Blanchard	158 (1989) 329
Hertz, O., see H. Böttcher	158 (1989) 453
Hess, P., see M. Buck	158 (1989) 486
Hikida, T., see Y. Kotagiri	158 (1989) 440
Hiratsuka, H., see T. Shimada	158 (1989) 435
Ho, C.-J., A.L. Motyka and M.R. Topp, Picosecond time-resolved $S_2 \rightarrow S_0$ fluorescence of xanthione in different fluid solvents	158 (1989) 51
Hoff, A.J., see R. Vreeker	158 (1989) 24
Horie, O. and G.K. Moortgat, A new transitory product in the ozonolysis of trans-2-butene at atmospheric pressure, Chem. Phys. Letters 156 (1989) 39. Erratum	158 (1989) 178
Hovingh, W.J. and R. Parson, Quasiresonant vibration-rotation transfer in atom-diatom collisions: a classical adiabatic interpretation	158 (1989) 222

Huang, Y.-L., see R. Callaghan	158 (1989) 531
Hug, W., see L. Hecht	158 (1989) 341
Hunt, R.D., see L. Andrews	158 (1989) 564
Ilich, P., C. Haydock and F.G. Prendergast, Electronic transitions in hydrated indole: a MD INDO/S study	158 (1989) 129
Irion, M.P. and A. Selinger, Fourier transform ion cyclotron resonance studies of sputtered metal cluster ions: the chemistry of Cu_n^+ with O_2	158 (1989) 145
Ishida, K., Spin and charge densities from the Hiller-Sucher-Feinberg identity: H_2^+ and BeH	158 (1989) 217
Ito, M., see K. Ajito	158 (1989) 193
Jacobs, A., M. Wahl, R. Weller and J. Wolfrum, Absolute reactive cross section and OH product state distribution for the reaction $\text{H}(1.86 \text{ eV}) + \text{CO}_2 \rightarrow \text{OH} + \text{CO}$	158 (1989) 161
Jacobsen, S.M., H.U. Güdel and C.A. Daul, Zeeman effects in the NIR luminescence of Ti^{2+} -doped MgCl_2	158 (1989) 77
Jarvie, T.P., K. Takegoshi, D. Suter, A. Pines and D.B. Zax, Suppression of the zero frequency peak in zero field NMR	158 (1989) 325
Jones, H., see R.-D. Urban	158 (1989) 443
Jovanic, B.R., V.V. Urošević, Lj.D. Zeković and B. Radenković, Bond lengths between aluminium and different complex ions	158 (1989) 172
Kalyanasundaram, K. and Md.K. Nazeeruddin, Photophysical and redox properties of mono- and bi-nuclear complexes of Osmium(II) with 2,3-bis(2-pyridyl)pyrazine as bridging ligand	158 (1989) 45
Karatsu, T., see T. Arai	158 (1989) 429
Kawai, R., see I.L. Garzón	158 (1989) 525
Kaya, K., see S. Nonose	158 (1989) 152
Kikuchi, N., see S. Nonose	158 (1989) 152
Klimov, A.N., see K.N. El'tsov	158 (1989) 271
Klinowski, J., see H. Hamdan	158 (1989) 447
Kobara, K., see M. Tsuji	158 (1989) 470
Kochanski, E., see L. Kurdi	158 (1989) 111
Kosloff, R., see B. Hartke	158 (1989) 238
Kotagiri, Y., M. Fujita, T. Hikida and Y. Mori, The triplet state of ammonia	158 (1989) 440
Krauss, M. and B. Guillot, Dipole moments in rare gas interactions	158 (1989) 142
Kucharski, S.A. and R.J. Bartlett, Coupled-cluster methods that include connected quadruple excitations, T_4 : CCSDTQ-1 and Q(CCSDT)	158 (1989) 550
Kühl, K. and R. Schinke, Time-dependent rotational state distributions in direct photodissociation	158 (1989) 81
Kühn, H., W. Vogel and D.-G. Welsch, Hot luminescence of molecules in strong laser fields	158 (1989) 233
Kunkely, H., see A. Vogler	158 (1989) 74
Kurawaki, J. and Y. Kusumoto, A resonance Raman study of the interaction between chlorophyll and N-methylmyristamide in aqueous surfactant solutions	158 (1989) 495
Kurdi, L. and E. Kochanski, Theoretical studies of sulfuric acid monohydrate: neutral or ionic complex?	158 (1989) 111
Kusumoto, Y., see J. Kurawaki	158 (1989) 495

Laganà, A., see V. Aquilanti	158 (1989) 87
Laganà, A., see M. Baer	158 (1989) 362
Langhoff, S.R., see C.W. Bauschlicher Jr.	158 (1989) 245
Langhoff, S.R., see C.W. Bauschlicher Jr.	158 (1989) 409
Laucagne, J.J., see P. Pradel	158 (1989) 412
Lee, Y.T., see L. Wang	158 (1989) 297
Leibl, W., see H.-W. Trissl	158 (1989) 515
Lepetit, M.-B., see B. Oujia	158 (1989) 559
Le Sech, C., see A. Henriët	158 (1989) 389
Levine, R.D., see V. Aquilanti	158 (1989) 87
Long, X.P., see I.L. Garzón	158 (1989) 525
Lous, E.J., see R. Vreeker	158 (1989) 24
Magg, U., see R.-D. Urban	158 (1989) 443
Malicet, J., J. Brion and D. Daumont, Temperature dependence of the absorption cross-section of ozone at 254 nm	158 (1989) 293
Malrieu, J.-P., see B. Oujia	158 (1989) 559
Marinelli, F. and A. Pellegatti, An ab initio CI determination of the low-lying electronic states of B ₃	158 (1989) 545
Martinho Simões, J.A. and D. Griller, Enthalpy of formation of the benzoyl radical by photoacoustic calorimetry	158 (1989) 175
Martynov, V.V., see K.N. El'tsov	158 (1989) 271
Maruyama, Y., see K. Awaga	158 (1989) 556
Masnou-Seeuws, F., see A. Henriët	158 (1989) 389
Mayne, H.R., see J.A. Harrison	158 (1989) 356
McCurdy, K.E., see J. Wormhoudt	158 (1989) 480
McKenzie, D.C., see B. Focher	158 (1989) 491
McLean, A.D., see D.J. DeFrees	158 (1989) 540
Metropoulos, A., see I.D. Petsalakis	158 (1989) 229
Miller, J.T., K.A. Burton, R.B. Weisman, W.-X. Wu and P.S. Engel, CARS spectroscopy of gas phase CD ₃	158 (1989) 179
Miller, T.A., see M.F. Cai	158 (1989) 475
Mizoguchi, N., Circuit resonance energies for Hückel and Möbius polycyclic conjugated molecules	158 (1989) 383
Monchicourt, P., see P. Pradel	158 (1989) 412
Monkhouse, P., see R. Schwarzwald	158 (1989) 60
Moortgat, G.K., see O. Horie	158 (1989) 178
Mori, Y., see Y. Kotagiri	158 (1989) 440
Morrow, M.E., R.C. Dye and C.J. Eckhardt, Raman and reflection spectra of a polymorph of the polydiacetylene TCDU	158 (1989) 499
Motyka, A.L., see C.-J. Ho	158 (1989) 51
Myers, A.B., see X. Ci	158 (1989) 263
Nazeeruddin, Md.K., see K. Kalyanasundaram	158 (1989) 45
Nguyen, M.T. and T.-K. Ha, 1,2 hydrogen shifts in thioformaldehyde (H ₂ C=S), phosphazene (HN=PH) and diphosphene (HP=PH): in-plane versus out-of-plane migration	158 (1989) 135
Nicolaides, C.A., see I.D. Petsalakis	158 (1989) 229

Nicoli, D.F., see B. Focher	158 (1989) 491
Nishi, T., see T. Shimada	158 (1989) 435
Nishimura, Y., see M. Tsuji	158 (1989) 470
Niu, B., see L. Wang	158 (1989) 297
Nonose, S., Y. Sone, N. Kikuchi, K. Fuke and K. Kaya, Reaction of vanadium and cobalt clusters with ethylene and acetylene	158 (1989) 152
Orton, E., see W.E. Brewer	158 (1989) 345
Oujia, B., M.-B. Lepetit and J.-P. Malrieu, From highly delocalized to strongly correlated domains through a unique MO into VB exponential transformation	158 (1989) 559
Pahapill, J. and L. Rebane, Persistent spectral hole-burning in heme proteins: cytochrome c and myoglobin	158 (1989) 283
Parson, R., see W.J. Hovingh	158 (1989) 222
Pawlikowski, M. and O. Sonnich Mortensen, Symmetry and magnetic vibrational circular dichroism spectra of doubly degenerate vibrational modes	158 (1989) 289
Pellegatti, A., see F. Marinelli	158 (1989) 545
Perdrix, M., see P. Pradel	158 (1989) 412
Petrella, G., A.T. Yinnon and R.B. Gerber, Atom scattering from isolated molecular adsorbates on surfaces: effects of adsorbate orientation	158 (1989) 250
Petsalakis, I.D., A. Metropoulos, G. Theodorakopoulos and C.A. Nicolaides, An estimate of the lifetime of excited tetrahydrogen	158 (1989) 229
Philippoz, J.-M., R. Zenobi and R.N. Zare, Pulsed heating of surfaces: comparison between numerical simulation, analytical models, and experiments	158 (1989) 12
Pines, A., see T.P. Jarvie	158 (1989) 325
Plonka, A., Yu.AA. Berlin and N.I. Chekunaev, Dispersive recombination in condensed phases	158 (1989) 380
Politzer, P., J.M. Seminario and P.R. Bolduc, A proposed interpretation of the destabilizing effect of hydroxyl groups on nitroaromatic molecules	158 (1989) 463
Pople, J.A., see K. Raghavachari	158 (1989) 207
Pradel, P., P. Monchicourt, J.J. Laucagne, M. Perdrix and G. Watel, Carbon cluster ion formation in a direct laser vaporization source	158 (1989) 412
Prendergast, F.G., see P. Ilich	158 (1989) 129
Prokhorov, A.M., see K.N. El'tsov	158 (1989) 271
Quercia, L., see A. Boschetti	158 (1989) 1
Radenkovic, B., see B.R. Jovanic	158 (1989) 172
Raghavachari, K., G.W. Trucks, J.A. Pople and E. Replogle, Highly correlated systems: structure, binding energy and harmonic vibrational frequencies of ozone	158 (1989) 207
Raghavachari, K., see A.-M. Sapse	158 (1989) 213
Rebane, L., see J. Pahapill	158 (1989) 283
Récamier, J. and M. Berrondo, Anharmonic effects in the matrix elements of an exponential potential	158 (1989) 116
Replogle, E., see K. Raghavachari	158 (1989) 207
Robinson, E.J., A note on the two-photon dissociation of HD ⁺	158 (1989) 405
Ruhman, S., see B. Hartke	158 (1989) 238

Sabbatini, N., see G. Blasse	158 (1989) 504
Sakuragi, H., see T. Arai	158 (1989) 429
Sapse, A.-M. and K. Raghavachari, Lithium bond: $\text{H}_3\text{N}---\text{LiOH}$ and $\text{H}_2\text{O}---\text{LiNH}_2$ complexes and their interconversions	158 (1989) 213
Savelli, G., see B. Focher	158 (1989) 491
Schinke, R., see K. Köhl	158 (1989) 81
Schönherr, T., J. Degen, E. Gallhuber, G. Hensler and H. Yersin, Geometrical distortions in excited A'_2 states of single-crystal $[\text{Ru}(\text{bpy})_3](\text{PF}_6)_2$	158 (1989) 519
Schwarzwalder, R., P. Monkhouse and J. Wolfrum, Fluorescence lifetimes for nitric oxide in atmospheric pressure flames using picosecond excitation	158 (1989) 60
Scotoni, M., see A. Boschetti	158 (1989) 1
Sears, T.J., see G.E. Hall	158 (1989) 184
Selinger, A., see M.P. Irion	158 (1989) 145
Seminario, J.M., see P. Politzer	158 (1989) 463
Shan, J.H., S.J. Wategaonkar and R. Vasudev, Vibrational state dependence of the \tilde{A} state lifetime of HONO	158 (1989) 317
Shimada, T., H. Suzuki, T. Nishi, K. Arishima and H. Hiratsuka, Photochemical hole-burning in highly doped reduced porphyrins/poly- <i>p</i> -xylylene systems	158 (1989) 435
Shirley, D.A., see L. Wang	158 (1989) 297
Simon, J.D., see S.-G. Su	158 (1989) 423
Sipior, J., see C.K. Teh	158 (1989) 351
Sizun, M., see E.A. Gislason	158 (1989) 102
Smit, W.M.A., see H. Donker	158 (1989) 509
Solodukhin, A.S., V.S. Starovoitov, S.A. Trushin and V.V. Churakov, Measurement of the deactivation rate of asymmetric vibrations in $^{12}\text{CO}_2$ - $^{13}\text{CO}_2$ mixtures	158 (1989) 70
Sone, Y., see S. Nonose	158 (1989) 152
Sonnich Mortensen, O., see M. Pawlikowski	158 (1989) 289
Stace, A.J., see C.A. Woodward	158 (1989) 417
Starovoitov, V.S., see A.S. Solodukhin	158 (1989) 70
Stręk, W. and J. Sztucki, Radiationless transitions in lanthanide(III) complexes. Effect of ligand anisotropy	158 (1989) 301
Stuchebrukhov, A.A., On the spectroscopy of adsorbed atoms: quasiharmonic approximation for the adbond	158 (1989) 274
Studer, S.L., see W.E. Brewer	158 (1989) 345
Su, S.-G. and J.D. Simon, Nonequilibrium and nonadiabatic effects on excited state electron transfer reactions in solution	158 (1989) 423
Sulkes, M., see C.K. Teh	158 (1989) 351
Suter, D., see T.P. Jarvie	158 (1989) 325
Suzuki, H., see T. Shimada	158 (1989) 435
Syage, J.A., On the direct vibrational spectroscopy of transition states	158 (1989) 122
Sztucki, J., see W. Stręk	158 (1989) 301
Takahara, Y., K. Yamaguchi and T. Fueno, Potential energy curves for transition metal dimers and complexes calculated by the approximately projected unrestricted Hartree-Fock and Møller-Plesset perturbation (APUMP) methods	158 (1989) 95
Takahashi, M., see K. Ajito	158 (1989) 193
Takegoshi, K., see T.P. Jarvie	158 (1989) 325

Tamai, N., see T. Arai	158 (1989) 429
Taylor, P.R., see C.W. Bauschlicher Jr.	158 (1989) 245
Teh, C.K., J. Sipior, M. Fink and M. Sulkes, Spectroscopy of jet-cooled phenylsilanes: the influence of hyperconjugation	158 (1989) 351
Theodorakopoulos, G., see I.D. Petsalakis	158 (1989) 229
Thulstrup, E.W., see J.L. Armony	158 (1989) 107
Tokumaru, K., see T. Arai	158 (1989) 429
Topp, M.R., see C.-J. Ho	158 (1989) 51
Torri, G., see B. Focher	158 (1989) 491
Tran, C.D., see M. Franko	158 (1989) 31
Trissl, H.-W., W. Gärtner and W. Leibl, Reversed picosecond charge displacement from the photoproduct K of bacteriorhodopsin demonstrated photoelectrically	158 (1989) 515
Trotta, E., see M. Giomini	158 (1989) 334
Trucks, G.W., see K. Raghavachari	158 (1989) 207
Trushin, S.A., see A.S. Solodukhin	158 (1989) 70
Tsuji, M., K. Koburai, S. Yamaguchi and Y. Nishimura, Dissociative excitation of SiH ₄ by collisions with helium active species	158 (1989) 470
Upham, J.E., see C.A. Woodward	158 (1989) 417
Urban, R.-D., A.H. Bahnmaier, U. Magg and H. Jones, The diode laser spectrum of thallium hydride (²⁰⁵ TlH and ²⁰³ TlH) in its ground electronic state	158 (1989) 443
Urosevic, V.V., see B.R. Jovanic	158 (1989) 172
Van Schaik, W., see H. Donker	158 (1989) 509
Van Zee, R.D., S.C. Blankespoor and T.S. Zwier, Spectroscopic studies of the Hg-He and Hg-Ar ₂ van der Waals' complexes: the Hg vapor fluorescence filter	158 (1989) 306
Vasudev, R., see J.H. Shan	158 (1989) 317
Vecchio, G., see B. Focher	158 (1989) 491
Vogel, W., see H. Kühn	158 (1989) 233
Vogler, A. and H. Kunkely, Photoluminescence of tetrameric silver(I) complexes	158 (1989) 74
Vreeker, R., E.J. Lous and A.J. Hoff, Absorbance-detected electron spin echoes from bacterial photosynthetic reaction centers. A theoretical study	158 (1989) 24
Wahl, M., see A. Jacobs	158 (1989) 161
Wang, L., B. Niu, Y.T. Lee and D.A. Shirley, Vibrational spectra of Se ₂ ⁺ and T ₂ ⁺ in their ground states	158 (1989) 297
Wategaonkar, S.J., see J.H. Shan	158 (1989) 317
Watel, G., see P. Pradel	158 (1989) 412
Weare, J.H., see I.L. Garzón	158 (1989) 525
Weisman, R.B., see J.T. Miller	158 (1989) 179
Weller, R., see A. Jacobs	158 (1989) 161
Welsch, D.-G., see H. Kühn	158 (1989) 233
Wiesen, P., see W. Bauer	158 (1989) 321
Wolfrum, J., see R. Schwarzwald	158 (1989) 60
Wolfrum, J., see A. Jacobs	158 (1989) 161
Woodward, C.A., J.E. Upham and A.J. Stace, Collision-induced vibrational excitation of Ar ₂₅ ⁺	158 (1989) 417

Wormhoudt, J., K.E. McCurdy and J.B. Burkholder, Measurements of the strengths of infrared bands of CF_2	158 (1989) 480
Wu, W.-X., see J.T. Miller	158 (1989) 179
Yamaguchi, K., see Y. Takahara	158 (1989) 95
Yamaguchi, S., see M. Tsuji	158 (1989) 470
Yamazaki, I., see T. Arai	158 (1989) 429
Yang, Y.A., C.W.S. Conover and L.A. Bloomfield, Production and photodetachment of stoichiometric sodium chloride cluster anions	158 (1989) 279
Yersin, H., see T. Schönherr	158 (1989) 519
Yinnon, A.T., see G. Petrella	158 (1989) 250
Zare, R.N., see J.-M. Philpott	158 (1989) 12
Zarrabian, S., see R.J. Harrison	158 (1989) 393
Zax, D.B., see T.P. Jarvie	158 (1989) 325
Zekovic, Lj.D., see B.R. Jovanic	158 (1989) 172
Zenobi, R., see J.-M. Philpott	158 (1989) 12
Zitserman, V.Yu., see A.M. Berezhkovskii	158 (1989) 369
Zueva, G.Ya., see K.N. El'tsov	158 (1989) 271
Zwier, T.S., see R.D. van Zee	158 (1989) 306